

Applicant : Gary L. Nelsestuen
Serial No. : 09/302,239
Filed : April 29, 1999
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Attorney's Docket No.: 09531-005001 / 97141

REMARKS

Applicant has amended claims 1 and 3-14 to recite sequence identifiers and for grammatical clarity. No new matter has been introduced. Applicant respectfully requests entry of the above amendments, which raise no new issues that would require further consideration and/or search, and which place the application in better condition for allowance.

Applicant thanks the Examiner for the courtesy of a telephone interview on July 18, 2002. The substance of the interview is set out in the remarks below.

Rejections under 35 U.S.C. § 112, second paragraph

The Examiner rejected claims 1, 3-14, 16 and 17 under 35 U.S.C. § 112, second paragraph. The Examiner asserted that the recitation of "residue 10 or 28 of SEQ ID NO:3 or SEQ ID NO:4, respectively" was confusing. Applicant has amended independent claim 1 to recite that residue 11 corresponds to residue 10 of SEQ ID NO:3 or SEQ ID NO:4, and residue 29 corresponds to residue 28 of SEQ ID NO:3 or SEQ ID NO:4. Claim 17, as previously amended, indicates that residue 33 corresponds to residue 32 of SEQ ID NO:3 or SEQ ID NO:4. The amino acid sequences of SEQ ID NO:3 and SEQ ID NO:4 refer to the GLA domain of human and bovine factor XII, respectively. Sequence identifiers also have been added to dependent claims 3-14. Applicant submits that claims 1, 3-14, and 16-17 are sufficiently definite under 35 U.S.C. § 112, second paragraph.

Attached is a marked-up version of the changes being made by the current amendment.


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Applicant asks that claims 1, 3-14 and 16-17 be allowed. No fees are due as this is being filed before the end of the statutory period. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 8/12/02


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Version with markings to show changes made

In the claims:

Claims 15 and 18-22 have been cancelled.

Claims 1 and 3-14 have been amended as follows:

1. (Three Times Amended) A Factor VII or Factor VIIa polypeptide comprising a modified GLA domain that enhances membrane binding affinity of said polypeptide relative to a corresponding native Factor VII or Factor VIIa polypeptide, said modified GLA domain comprising at least one amino acid substitution at residue 11 (corresponding to residue 10 of SEQ ID NO:3 or SEQ ID NO:4) or 29 (corresponding to residue [10 or] 28 of SEQ ID NO:3 or SEQ ID NO:4), respectively).

3. (Twice Amended) The polypeptide of claim 1, wherein a glutamine, a glutamic acid, an aspartic acid, or an asparagine residue is substituted at residue 11 (corresponding to residue 10 of SEQ ID NO:3 or SEQ ID NO:4).

4. (Amended) The polypeptide of claim 3, wherein a glutamine residue is substituted at residue 11 (corresponding to residue 10 of SEQ ID NO:3 or SEQ ID NO:4).

5. (Twice Amended) The polypeptide of claim 1, wherein a glutamic acid or a phenylalanine residue is substituted at residue 29 (corresponding to residue 28 of SEQ ID NO:3 or SEQ ID NO:4).

6. (Amended) The polypeptide of claim 3, wherein a glutamic acid or a phenylalanine is substituted at residue 29 (corresponding to residue 28 of SEQ ID NO:3 or SEQ ID NO:4).

7. (Three Times Amended) The polypeptide of claim 1, wherein said modified GLA domain further comprises an amino acid substitution at residue 33 (corresponding to residue 32 of SEQ ID NO:3 or SEQ ID NO:4).

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8. (Amended) The polypeptide of claim 7, wherein a glutamic acid or an aspartic acid is substituted at residue 33 (corresponding to residue 32 of SEQ ID NO:3 or SEQ ID NO:4).

9. (Amended) The polypeptide of claim 3, wherein said modified GLA domain further comprises a substitution of a glutamic acid or an aspartic acid at residue 33 (corresponding to residue 32 of SEQ ID NO:3 or SEQ ID NO:4).

10. (Twice Amended) The polypeptide of claim 5, wherein said modified GLA domain further comprises a substitution of a glutamic acid or an aspartic acid at residue 33 (corresponding to residue 32 of SEQ ID NO:3 or SEQ ID NO:4).

11. (Amended) The polypeptide of claim 3, wherein said modified GLA domain further comprises a substitution of a glutamic acid or a phenylalanine at residue 29 (corresponding to residue 28 of SEQ ID NO:3 or SEQ ID NO:4).

12. (Amended) The polypeptide of claim 11, wherein said modified GLA domain comprises a glutamic acid or an aspartic acid residue at amino acid 33 (corresponding to residue 32 of SEQ ID NO:3 or SEQ ID NO:4).

13. (Amended) The polypeptide of claim 9, wherein said modified GLA domain comprises a glutamine residue at amino acid 11 (corresponding to residue 10 of SEQ ID NO:3 or SEQ ID NO:4) and a glutamic acid residue at amino acid 33 (corresponding to residue 32 of SEQ ID NO:3 or SEQ ID NO:4).

14. (Amended) The polypeptide of claim 11, wherein said modified GLA domain comprises a substitution of a glutamine at residue 11 (corresponding to residue 10 of SEQ ID NO:3 or SEQ ID NO:4) and a phenylalanine at residue 29 (corresponding to residue 28 of SEQ ID NO:3 or SEQ ID NO:4).